

Application No. 10/750,523  
In Response to Advisory Action dated January 23, 2007  
Response Dated: February 22, 2007

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**GENERAL REMARKS**

Applicants respectfully disagree with Examiner's 102 rejections of the pending independent claims of the present Application. The Examiner had previously rejected all the independent claims under 35 U.S.C. 102(b) as being anticipated by Hinton et al. (US 5,500,948), hereinafter "Hinton". Applicants have canceled Claims 1-11, amended Claims 14-15 and 20, and have added new Claims 21-40. Applicants have presented new claims that contain patentable subject matter. Applicants respectfully submit that all pending claims are in condition for allowance.

In a conversation held on January 18, 2007, Examiner Campos stated that she would discuss how an amendment to the pending claims would overcome the cited reference (i.e., Hinton), and suggested that the Applicants could present a proposed set of claims. As a consequence, a telephone interview was held on February 21, 2007 to discuss a proposed set of claims. As was stated during the telephone interview to Examiner Campos and Supervisory Examiner Shah, the undersigned respectfully stated that what is disclosed in Hinton does not teach what is recited in one or more elements and/or features of the proposed set of claims. These elements and/or features have been incorporated into the Listing of the Claims. During the course of this interview, the Examiner referenced Hinton at Figure 3 and Columns 6-7 in an attempt to show a teaching of one or more elements of the third clause of independent Claim 21. As was pointed out by the undersigned during the discussion, Figure 3 and Columns 6-7 of Hinton teaches a translation write buffer (TWB). Further, the TWB is represented as element #62 in Figure 2 of Hinton. The Applicants' response was that Figure 3 and Columns 6-7 disclose a TWB (translation write buffer), which is different from the translation lookaside buffer (TLB)

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claimed in the claimed invention, because Hinton's TWB performs only write operations. In contrast, Claim 21 for example, recites a writing *and* reading page frame number data using a translation lookaside buffer (TLB) (emphasis denoted in italics). Examiner Campos reiterated the text of Hinton in Column 6, lines 37-67 (which describes a TWB), in attempt to show a teaching of a translation lookaside buffer (TLB) as recited in the claimed invention. However, the undersigned maintained that Hinton's translation write buffer (TWB) does not teach a translation lookaside buffer (TLB) as claimed in the pending claims of the present Application, since the claimed invention recites a translation lookaside buffer (TLB) that performs both read and write (or storage and retrieval) operations as opposed to Hinton's translation write buffer (TWB) which performs only write operations. Furthermore, it was also pointed out that nowhere in Hinton is there a teaching of "storing even or odd page frame numbers into a *single page frame number field* associated with an entry of said translation lookaside buffer by way of using a first storage register for even page frame numbers and a second storage register for odd page frame numbers when said writing is performed," as recited by the one or more elements in the third clause of Claim 21 (emphasis denoted in italics). As a consequence, the undersigned had respectfully stated that at least for the foregoing reasons, at least Claim 21, for example, was in condition for allowance.

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**REMARKS IN RESPONSE TO ADVISORY ACTION**

As per the discussion with the Examiner on January 18, 2007, the Examiner had indicated that the feature "reducing the size of a translation lookaside buffer" had not been given patentable weight since it was recited in the preamble. As may be referenced in the Advisory action of January 23, 2007, the Examiner has stated that "the recitation "A method of reducing the size of a translation lookaside buffer comprising" has not been given patentable weight because the recitation occurs in the preamble." In response, the Applicants have incorporated the patentable subject matter in the preamble of Claim 1, as was indicated by the Examiner, into the body of independent Claims 29, 32, and 35. As a consequence, the Applicants respectfully submit that such limitation in Claims 29, 32, and 35 should now be given patentable weight. The Applicants request allowance of Claims 29, 32, and 35 and their associated dependent claims.

Furthermore, Applicants do not disagree with the Examiner that Hinton teaches a translation write buffer (TWB) as described by the Examiner in reference to Col. 6, lines 37-63 of Hinton. The Applicants agree that Hinton teaches a TWB as illustrated in Figure 3. However, Hinton does not teach a translation lookaside buffer (TLB) as recited in the claimed invention of independent Claims 12, 21, 29, 32, 34, and 35. Therefore, for this reason alone, Applicants respectfully submit that what is recited in Claims 12, 21, 29, 32, 34, and 35 is different from what is disclosed by Hinton. The Applicants respectfully request allowance of Claims 12, 21, 29, 32, 34, and 35.

Additionally, nowhere in Col. 6, lines 37-63 or Col. 7, lines 5-14, and/or Figure 3, as referenced by the Examiner, is there a teaching of storing or retrieving even and odd page frame numbers into *a single page frame number field*," as recited in Claim 21, for example (emphasis

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denoted in *italics*). Contrary to what the Examiner alleges, Col. 6, lines 37-63 and Fig. 3 of Hinton, discloses two distinct and separate registers for storing "physical addresses":

The physical registers (104, 106) provide stored-physical addresses to the MUX (100). Registers (106) marked "0" are for even-numbered 4KB pages, addresses for which bit 12 is a zero. Registers ((104) marked "1" are for odd-numbered 4KB pages, addresses for which bit 12 is a one.

As may be easily seen from the above passage from Hinton, Hinton's physical register 104 is used to store odd numbered pages while Hinton's physical register 106 is used to store even numbered pages. Hinton utilizes separate and distinct memories to store even and odd pages. Nowhere in Hinton is there any disclosure of storing and/or retrieving even and odd page frame numbers into a "single page frame number field," as recited in independent Claims 12, 16, 21, 29, 32, and 35. The Applicants respectfully submit that Claims 12, 16, 21, 29, 32, and 35 are not anticipated by Hinton, and that these claims contain patentable subject matter. The Applicants request allowance of Claims 12, 16, 21, 29, 32, and 35 and their corresponding dependent claims.

FROM McANDREWS, HELD, & MALLOY

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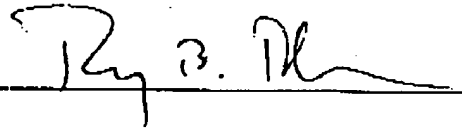
**CONCLUSION**

Based on at least the foregoing, the Applicants believe that Claims 12-40 are in condition for allowance. A Notice of Allowance is courteously solicited. Should the Examiner disagree, the Applicants kindly request the Examiner to telephone the undersigned at (312) 775-8246.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Dated: February 22, 2007

Respectfully submitted,



Roy B. Rhee  
Reg. No. 57,303

McAndrews, Held & Malloy, Ltd.  
500 West Madison Street, 34th Floor  
Chicago, Illinois 60661-2565  
Telephone: (312) 775-8246  
Facsimile: (312) 775-8100